

Notice of Allowability

Application No.

10/669,288

Examiner

Usman Khan

Applicant(s)

ISHIKAWA, YOSHIKAZU

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/24/2003.
2. ☒ The allowed claim(s) is/are 1-7.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20061213.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>12/20/2006</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>10/04/2004</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 10/04/2004 has been considered by the examiner. The submission is in compliance with the provisions of 37 CFR 1.97.

EXAMINER'S AMENDMENT

Authorization for this examiner's amendment was given in a telephone interview with Steven F. Meyer on 12/20/2006.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Regarding claim 1:

In line 17 of page 51, the words "**which is equals to**" have been amended to as **--which is equal to--**.

Regarding figures:

The following changes to the drawings have been approved by the examiner and agreed upon by applicant: In each of **figures 9, 10A, 10B, 11, 12, 13, 14, 15A, 15B, 16A, 16B, 17, 18** the label "**Prior Art**" has been added. In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

Allowable Subject Matter

Claims 1-7 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding independent **claim 1**, the prior art of record fails to teach or fairly suggest "An image sensing apparatus comprising: a vibration detector that detects vibration of the apparatus; a vibration correction unit that corrects vibration of an image caused by vibration of said apparatus; and a control unit that calculates a vibration correction signal based on a vibration detection signal from said vibration detector and controls said vibration correction unit, wherein said control unit comprises: a first detection unit that detects whether a first frequency obtained from said vibration detection signal and used for calculating the vibration correction signal falls within a first frequency band which is equals to or lower than a predetermined frequency; a second detection unit that detects whether a second frequency obtained from said vibration detection signal and used for calculating the vibration correction signal falls within a

Art Unit: 2622

second frequency band exceeding said predetermined frequency or not; a variable high frequency band pass unit that changes the pass band for the vibration detection signal on the high frequency side depending on cases 1) where the first frequency falls within the first frequency band and the second frequency does not fall within the second frequency band, 2) where the first frequency does not fall within the first frequency band and the second frequency falls within the second frequency band, and 3) where the first frequency falls within the first frequency band and the second frequency falls within the second frequency band simultaneously; and a calculation unit that calculates the vibration correction signal from a vibration frequency of the vibration detection signal passed through said variable high frequency band pass unit and outputs the vibration correction signal to said vibration correction unit".

Regarding **claims 2 - 7**, these claims are allowed as being dependent from allowed independent claim 1.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamazaki et al. (US Patent No. 6,263,162) discloses an apparatus such as an image-shake preventing apparatus and a control method therefor, an image-shake

preventing unit is caused to gradually come into contact with a movable-range end when an image-shake preventing operation is ended.

Konishi (US Patent No. 6,229,960) discloses a control device for image blur correction, which is applied to an image blur correction device, includes a calculation section and restriction section. The calculation section performs at least read-in operation of reading in outputs from vibration sensors, performs first calculation by using the outputs, and generates a driving control signal for driving the image blur correction device. The calculation section also performs second calculation different from the first calculation. The restriction section permits read-in operation of the output from the vibration sensors but restricts the first calculation when the calculation section performs the second calculation. With this arrangement, when the timing at which the calculation section performs the second calculation overlaps the timing at which the calculation section performs the first calculation, the first calculation is not performed, but the outputs from the vibration sensors is read in. An image blur correction apparatus, optical apparatus, and camera each including the image blur correction device are also disclosed.

Satoh (US Patent No. 6,122,446) discloses a blur correction camera in which an image movement (blur) amount on an image-forming plane is displayed more exactly based on the actual states of a camera shake and a blur correcting member. The blur correction camera includes a camera shake sensing section for sensing a camera

shake, a blur correcting member for correcting an amount of image movement due to the camera shake, a first image movement amount arithmetic section for calculating an image movement amount on a film plane in response to an output of the camera shake sensing section, a second image movement amount arithmetic section for calculating an image movement amount on the film plane in response to an output of the camera shake sensing section when the image movement amount is corrected by the blur correcting member, and a third image movement amount arithmetic section for calculating a difference between an arithmetic result of the first image movement amount arithmetic section and that of the second image movement amount arithmetic section.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Usman Khan
12/13/2006
Patent Examiner
Art Unit 2622



DAVID OMETZ
SUPERVISORY PATENT EXAMINER